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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,481	10/27/2003	Abhinand Lath	1042-004	4268

25215 7590 11/04/2005  
DOBRUSIN & THENNISCH PC  
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PONTIAC, MI 48342

EXAMINER

LEE, GUIYOUNG

ART UNIT PAPER NUMBER

2875

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/694,481	LATH, ABHINAND	
	Examiner	Art Unit	
	Guiyoung Lee	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Prelim./Amdt.*

1. Receipt is acknowledged of the amendment filed 07/26/2005.
2. Claims 1-22 are pending.

### *Response to Arguments*

3. Applicant's arguments filed 07/26/2005 have been fully considered but they are not persuasive. In response to Applicant's arguments that the reference to Doneen does not disclose the limitation, "transmitting light from a first location on a first surface to a second location on the first surface" as claimed in independent claims 1, 7, and 11, Examiner does not agree with Applicant's argument. First, as a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. For example, Doneen discloses a plurality of waveguide 54 embedded in the substrate 52. If Doneen's waveguide 54 is capable of transmitting light from a first location to a second location, then Doneen's waveguide meets the limitation above. In other word, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

*Claim Objections*

4. Claims 19 are objected to because of the following informalities: The phrase "claim 17" appears a typographical error. Appropriate correction is required.
5. Claim 20 is objected to because of the following informalities: Claim 20 recites the limitation "its" in line 3. There is insufficient antecedent basis for this limitation in the claim.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-11, 15, and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Doneen et al. (US 4,906,837) cited by Applicant.

Re claims 1-5 and 7-10: Doneen discloses an article of manufacture for detecting motion and a method of making an article of manufacture, comprising a substrate (52 in Fig. 2) having a plurality of light pipes (54, 56, 58, 72, 74, 76, and 78 in Fig. 2), wherein each light pipe is capable of transmitting light from a first location to a second location (col. 4, line 56 +). Further, Doneen discloses the light pipe is capable of transmitting light from a plurality of locations to a single location, from a single location to a plurality of locations (See the splitter junctions 73, 75 and 77 of the light pipes in Fig. 2).

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Re claims 6 and 15: Doneen discloses the light pipe and the substrate are the same material and wherein the light pipes are separated from the substrate along at least a portion of their length by a refractive index boundary (col. 4, lines 5-22).

Re claims 11 and 21-22: Doneen discloses a method of making an article of manufacture by creating a refractive index boundary between the pipe and the substrate and a method of transmitting information through a plurality of light pipes in a substrate as discussed above.

Further, Doneen discloses a step of interfering with the transmission of light through the light pipe before the light arrives at the second location a plurality of lenses is interfering the transmission of light (col. 2, lines 32-42)].

7. Claims 11-14 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Stanford (US 6,082,886).

Re claims 11-14 and 19-20: Stanford discloses a method of an article of manufacture comprising a concrete block substrate (12 in Fig. 1) and a plurality of light pipe imbedded in the concrete substrate (20 in Fig. 3) so that there is a refractive index boundary between the light pipes and the concrete substrate. Further, Stanford discloses an external, visible light source (22), wherein light inputted into a first end of the light pipe is guided along the light pipe and emitted at the second end of the light pipe. Furthermore, Stanford teaches a method of making the article by embedded the light pipe in an uncured concrete substrate (col. 4, lines 5-39).

8. Claims 11 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Daniel (US 4,234,904).

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Re claims 11 and 16-17: Daniel discloses a method of making an article of manufacture, comprising a step of creating a refractive index boundary between a material (optical fiber) and a substrate (cloth threads). Further, Daniel discloses a method of making an article comprising a step of combining at least one light pipe with a plurality of fibers to form a woven fabric (Fig. 4 and col. 2, lines 32 ++).

*Claim Rejections - 35 USC § 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doneen.

Re claims 18: Doneen discloses at least one light pipe having a first end pointing in a first direction and a second end pointing in a second direction (See 72, 74 and 76 in Fig. 2). Further, Doneen discloses the first end and the second end of the light pipe is coplanar and flush with a first exposed surface and a second exposed surface of the matrix respectively. Doneen does disclose that the first and second directions of the light pipe are opposed to each other. However, light pipe or optical fiber is flexible so that they are easily bendable. Doneen further disclose the light pipe is bended (See 100 and 118 in Fig. 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Doneen's light pipe to extend in different directions because of the flexibility of the light pipe.

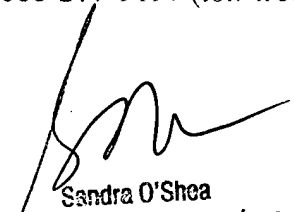
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guiyoung Lee whose telephone number is 571-272-2374. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LGY



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